

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: METALUX

Report Number: P1588409

Luminaire Tested: 24CZSP-57HE-L945

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588409
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2603-711-1)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 24CZSP-57HE-L945
Description: 2x4 CZSP LED Luminaire, 4500K CCT and 5500 lumens, 90CRI, Ribbed Lens
Light Source: -
Ballast/Driver: -

Summary

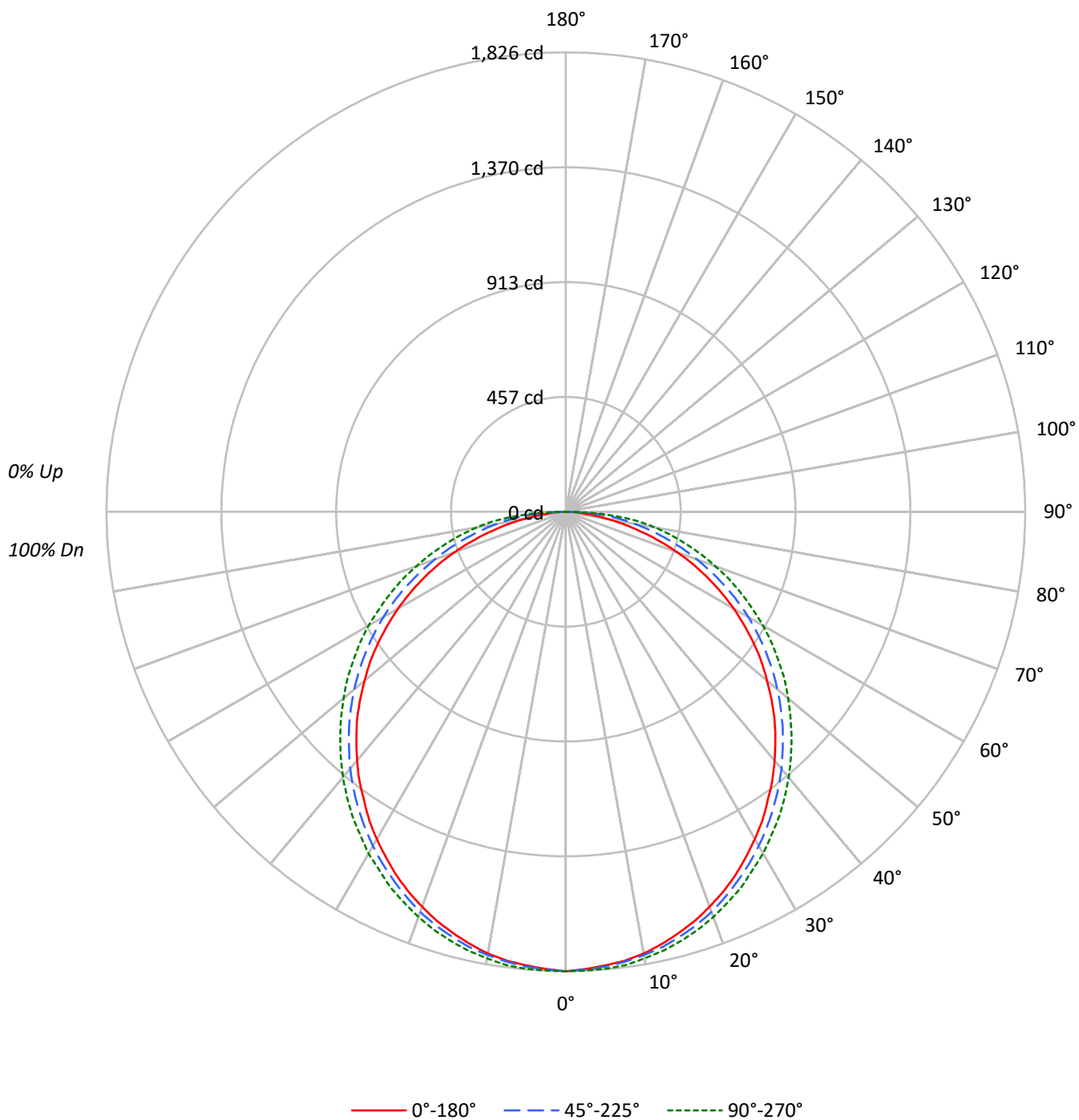
Lumens per Lamp: N/A
Luminaire Lumens: 5418.0 lumens
Efficiency: N/A
Efficacy: 137.5 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.27 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 39.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20			
RC	80				70				50				30				10			0
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50	30	10	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	108	103	98	94	105	101	97	93	96	93	90		92	90	87		89	87	85	82
2	98	89	82	76	95	87	81	75	84	78	73		81	76	72		77	74	70	68
3	89	78	70	63	87	77	69	62	74	67	61		71	65	60		68	63	59	57
4	81	69	60	53	79	68	59	53	65	58	52		63	56	51		61	55	51	48
5	75	62	52	46	73	60	52	45	58	51	45		56	50	44		54	49	44	42
6	69	55	46	40	67	54	46	39	53	45	39		51	44	39		49	43	38	36
7	64	50	41	35	62	49	41	35	48	40	35		46	39	34		45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31		42	36	31		41	35	30	29
9	56	42	34	28	54	41	33	28	40	33	28		39	32	28		38	32	27	26
10	52	39	31	25	51	38	30	25	37	30	25		36	30	25		35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2797	2797	2797
5°	2783	2790	2803
10°	2773	2782	2803
15°	2749	2773	2801
20°	2723	2759	2794
25°	2694	2734	2785
30°	2657	2713	2774
35°	2616	2689	2764
40°	2581	2665	2755
45°	2543	2641	2748
50°	2487	2616	2748
55°	2435	2591	2755
60°	2361	2568	2774
65°	2261	2527	2793
70°	2115	2484	2827
75°	1881	2449	2919
80°	1547	2460	3174
85°	1054	2741	3504

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 85°

Luminance: 3504 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	172.9	3.2
10°-20°	494.9	9.1
20°-30°	748.4	13.8
30°-40°	903.1	16.7
40°-50°	944.3	17.4
50°-60°	871.2	16.1
60°-70°	692.8	12.8
70°-80°	437.2	8.1
80°-90°	153.3	2.8
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1416.2	26.1
0°-40°	2319.2	42.8
0°-60°	4134.7	76.3
0°-90°	5418.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5418.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1826	1826	1826	1826	1826	
5°	1810	1823	1814	1819	1823	172
15°	1734	1753	1748	1762	1766	489
25°	1594	1618	1618	1639	1648	734
35°	1399	1429	1438	1466	1478	877
45°	1174	1200	1219	1255	1269	904
55°	912	939	970	1017	1032	814
65°	624	652	697	756	771	616
75°	318	354	414	475	493	337
85°	60	99	156	193	199	76
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1826.4	1826.4	1826.4	1826.4	1826.4
2.5°	1818.9	1830.9	1820.4	1826.4	1824.9
5°	1809.9	1823.4	1814.4	1818.9	1823.4
7.5°	1799.4	1814.4	1803.9	1811.4	1817.4
10°	1782.9	1797.9	1788.9	1797.9	1802.4
12.5°	1760.4	1778.4	1772.4	1782.9	1787.4
15°	1733.5	1752.9	1748.5	1761.9	1766.4
17.5°	1705.0	1726.0	1723.0	1738.0	1742.5
20°	1670.5	1694.5	1693.0	1708.0	1714.0
22.5°	1634.5	1658.5	1657.0	1673.5	1681.0
25°	1594.0	1618.0	1618.0	1639.0	1648.0
27.5°	1549.0	1576.0	1577.5	1598.5	1606.0
30°	1502.5	1529.5	1534.0	1556.5	1568.5
32.5°	1454.5	1480.0	1487.5	1513.0	1522.0
35°	1399.1	1429.1	1438.0	1466.5	1478.5
37.5°	1348.1	1375.1	1387.1	1417.1	1429.1
40°	1291.1	1319.6	1333.1	1366.1	1378.1
42.5°	1232.6	1261.1	1276.1	1312.1	1324.1
45°	1174.1	1199.6	1219.1	1255.1	1268.6
47.5°	1109.7	1138.1	1159.1	1198.1	1211.6
50°	1043.7	1073.7	1097.7	1139.6	1153.1
52.5°	980.7	1007.7	1034.7	1081.2	1096.2
55°	911.7	938.7	970.2	1016.7	1031.7
57.5°	841.2	868.2	904.2	953.7	970.2
60°	770.8	797.7	838.2	889.2	905.7
62.5°	697.3	724.3	769.3	821.7	836.7
65°	623.8	652.3	697.3	755.8	770.8
67.5°	548.8	577.3	625.3	686.8	703.3
70°	472.4	503.8	554.8	616.3	631.3
72.5°	392.9	428.9	485.8	545.8	563.8
75°	317.9	353.9	413.9	475.4	493.3
77.5°	244.4	284.9	344.9	409.4	428.9
80°	175.4	215.9	278.9	341.9	359.9
82.5°	112.5	154.5	217.4	277.4	292.4
85°	60.0	99.0	156.0	193.4	199.4
87.5°	19.5	51.0	70.5	93.0	94.5
90°	0.0	0.0	0.0	0.0	0.0

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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	15.13	16.80	15.50	17.12	17.43	15.85	17.52	16.22	17.84	18.15
	3H	16.92	18.43	17.29	18.76	19.12	18.02	19.54	18.40	19.86	20.22
	4H	17.55	18.98	17.95	19.33	19.70	18.95	20.38	19.35	20.73	21.11
	6H	17.97	19.30	18.38	19.67	20.06	19.81	21.14	20.22	21.51	21.90
	8H	18.08	19.36	18.51	19.75	20.14	20.19	21.46	20.61	21.85	22.25
	12H	18.14	19.36	18.57	19.74	20.17	20.50	21.72	20.93	22.10	22.53
4H	2H	15.90	17.33	16.29	17.67	18.05	16.46	17.89	16.85	18.24	18.61
	3H	17.92	19.13	18.33	19.52	19.92	18.87	20.08	19.28	20.47	20.87
	4H	18.68	19.78	19.11	20.19	20.62	19.97	21.07	20.40	21.48	21.92
	6H	19.23	20.20	19.69	20.64	21.09	21.01	21.98	21.46	22.42	22.87
	8H	19.39	20.30	19.85	20.74	21.20	21.48	22.38	21.93	22.82	23.29
	12H	19.49	20.31	19.97	20.78	21.25	21.87	22.69	22.35	23.16	23.63
8H	4H	19.17	20.07	19.63	20.51	20.98	20.29	21.19	20.75	21.63	22.10
	6H	19.88	20.63	20.37	21.12	21.59	21.51	22.26	22.00	22.75	23.22
	8H	20.12	20.80	20.62	21.30	21.79	22.10	22.78	22.61	23.29	23.77
	12H	20.29	20.89	20.79	21.38	21.94	22.65	23.25	23.15	23.74	24.30
12H	4H	19.27	20.09	19.75	20.56	21.03	20.32	21.13	20.80	21.61	22.08
	6H	20.04	20.72	20.54	21.22	21.71	21.57	22.25	22.08	22.75	23.24
	8H	20.36	20.96	20.87	21.45	22.01	22.25	22.85	22.75	23.34	23.90